

Predictive Analytics – From Theory to Practice



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Predictive Analytics models are assuming increasing role in the world of Big Data for making decisions in many industries – marketing, banking, insurance, telecommunication, healthcare, cyber and more. Even in the era of data mining and machine learning, the leading predictive models still belong to the realm of regression. While regression models were originally developed to explain phenomena, find relationships between variables and draw conclusions, in prediction models the main objective is to build models which are general enough to apply for predicting new data, even at the expense of giving up some model accuracy. Therefore, models with good explanation power are not necessarily models with good prediction power, and vice-versa. In this article, we discuss the differences between explanation and prediction models and propose several criteria for building good predictive models. We also discuss some performance measures to assess the quality of prediction results in classification problems based on logistic regression.

Controlling the Structure of Online Information Flows to Solicit Innovative New Product Ideas



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This paper examines the popular marketing practice of “interdependent ideation” (e.g., crowdsourcing and electronic brainstorming) where firms solicit ideas from customers through online platforms that allow for customers to be exposed to or “inspired” by other customers’ ideas when generating their own.

This paper studies the way in which the network structure between ideating customers affects the innovativeness of individual customers’ product/service ideas in ideation tasks. Specifically, I discuss that (i) more connections between one’s “inspirations” (other customers) negatively affects the innovativeness of an individual’s ideas, (ii) this occurs because idea inspirations are more likely to be similar or redundant when the sources of those inspirations (i.e., other customers to which one is connected) are more densely interconnected. Firms using open innovation platforms should therefore consider restricting communication between ideating customers in order to maximize the innovativeness of the contributed ideas.